

REMARKS

In view of the preceding amendments comments which follow, and pursuant to 37 C.F.R. § 1.111, reconsideration of the Official Action of December 15, 2005 is respectfully requested by Applicants.

Summary

Claims 1 – 13, 15 – 28, and 30 stand rejected. Claims 1, 8 – 11, 13, 18, 19, and 21 has been amended. No new matter has been introduced as a result of these amendments.

Claims 1 – 13, 15 – 28, and 30 are pending following entry of the remarks.

Rejections under 35 U.S.C. § 112

The Examiner has rejected Claims 8 – 13, and 15 – 22 under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Applicants have amended Claims 8 – 11 by clarifying that the recited film thickness is along the height of the multiplayer film.

In regard to Claims 18 – 22, Applicants have amended Claim 18 to remove the ambiguity about the location of the third antiferromagnetic layer. Claim 18 now recites that a third antiferromagnetic layer is provided between the second antiferromagnetic layer and the second free magnetic layer."

Rejections under 35 U.S.C. § 102

The Examiner has rejected Claims 1 – 7 under 35 U.S.C. § 102 (e) as being anticipated by Saito (U.S. Patent Application 2003/0103299 A1). Although Applicants respectfully traverse these rejections, Claim 1 has been amended to clarify the invention and remove any ambiguities that may have been the basis for these rejections.

Pending Claim 1 is directed to a magnetic sensing element. The magnetic sensing element comprises a multilayer film including a first antiferromagnetic layer, a pinned magnetic layer, a non-magnetic material layer and a free magnetic layer.

Amended Claim 1 now recites that "a pair of electrode layers is provided on both side portions of the multilayer film along the track-width direction."

The Examiner states that Saito discloses a pair of electrode layers provided on both side portions of the multilayer film, namely elements (20) and (31). In Saito, the pair of electrodes (20) and (30) is provided on both sides of the multilayer film in the height direction. In contrast, as clarified above, the claimed pair of electrodes is provided on both sides of the multilayer film in the track-width direction.

Based at least on the above discussed reason, the claimed arrangement of Claim 1 is distinguishable from Saito. Thus, Claim 1 is allowable over Saito, as well as dependent Claims 2 – 7.

The Examiner has rejected Claims 1 – 7 under 35 U.S.C. § 102 (e) as being anticipated by Hoshiya et al. (U.S. Patent Application 2003/0206384 A1). Although Applicants respectfully traverse these rejections, Claim 7 has been amended to remove any ambiguities that may have been the basis for these rejections.

The Examiner states that Hoshiya et al. disclose a pair of electrode layers provided on both side portions of the multilayer film, namely elements (35) and (36). In Hoshiya et al., this pair of electrodes is provided on both sides of the multilayer film in the height direction. In contrast, as clarified above, the claimed pair of electrodes is provided on both sides of the multilayer film in the track-width direction.

Based at least on the above discussed reason, the claimed arrangement of Claim 1 is distinguishable from Hoshiya et al. Thus, Claim 1 is allowable over Hoshiya et al., as well as dependent Claims 2 – 7.

Accordingly, Applicants respectfully request that these claim rejections under 35 USC 102(e) be withdrawn.

Rejections under 35 U.S.C. § 103

The Examiner has rejected Claims 23 – 27 under 35 U.S.C. § 103 (a) as being unpatentable over Hoshiya et al. in view of Mack et al. (US Patent 6,462,919 B1). Applicants respectfully traverse these rejections.

Claim 23 is dependent on Claim 1. Applicants submit that both references, Hoshiya et al. and Mack et al., fail to teach or disclose the Claim 1 arrangement that the pair of electrodes is provided on both sides of the multilayer film in the track-width direction.

As discussed above in regard to the 102(e) rejection, the arrangement of Claim 1 is distinguished from Hoshiya et al. Thus, Hoshiya et al. may not be relied upon in regard to this 103(a) rejection of Claim 23.

Accordingly, Hoshiya et al. and Mack et al. may not properly be combined to reject Claim 23. Claim 23 is allowable over the cited references, taken singly or in combination with each other, as well as dependents Claims 24 – 27.

The Examiner has next rejected Claims 28 under 35 U.S.C. § 103 (a) as being unpatentable over Hoshiya et al. in view of Mack et al., and in further view of Lin et al. (US Patent Application No.2003/015636 A1). Applicants respectfully traverse these rejections.

Claim 28 is directly dependent on Claim 23, and indirectly dependent on Claim 1. Applicants submit that all three references, Hoshiya et al., Mack et al., and Lin et al. fail to teach or disclose the Claim 1 arrangement that the pair of electrodes is provided on both sides of the multilayer film in the track-width direction.

As discussed above in regard to the 103(a) rejection, the arrangement of Claim 23 is distinguished from Hoshiya et al. and Mack et al. Thus, Hoshiya et al. and Mack et al. may not be relied upon in regard to this 103(a) rejection of Claim 28.

Accordingly, Hoshiya et al., Mack et al., and Lin et al. may not properly be combined to reject Claim 28. Claim 28 is allowable over the cited references, taken singly or in combination with each other.

The Examiner has next rejected Claims 30 under 35 U.S.C. § 103 (a) as being unpatentable over Hoshiya et al. in view of Mack et al., as applied above, and in further view of Song et al. (US Patent No. 6,795,280 B1). Applicants respectfully traverse these rejections.

Claim 30 is directly dependent on Claim 23, and indirectly dependent on Claim 1. Applicants submit that all three references, Hoshiya et al., Mack et al., and Song et al. fail to teach or disclose the Claim 1 arrangement that the pair of electrodes is provided on both sides of the multilayer film in the track-width direction.

As discussed above in regard to the 103(a) rejection, the arrangement of Claim 23 is distinguished from Hoshiya et al. and Mack et al. Thus, Hoshiya et al. and Mack et al. may not be relied upon in regard to this 103(a) rejection of Claim 30.

Accordingly, Hoshiya et al., Mack et al., and Song et al. may not properly be combined to reject Claim 30. Claim 30 is allowable over the cited references, taken singly or in combination with each other.

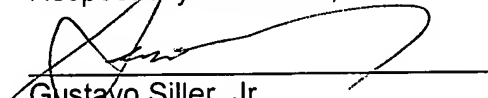
Accordingly, Applicants respectfully request that these claim rejections under 35 USC 103(a) be withdrawn.

Conclusion

Applicants submit that this application is now in condition for allowance, and favorable reconsideration of this application in view of the above remarks is respectfully requested. Applicants believe a one-month extension is due, and a corresponding check is enclosed. If any additional fees are due, Applicants request that this paper constitutes any necessary petition and authorizes the Commissioner to charge any underpayment, or credit any overpayment, to Deposit Account No. 23-1925.

If the Examiner still believes the application is not in condition for allowance, the Examiner is requested to telephone the undersigned attorney at the below listed number.

Respectfully submitted,



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